

REMARKS

Claims 4, 11, 14, 16 and 18 are pending in this application. By this Amendment, claim 4 is amended to further clarify the features recited therein. The title is amended to overcome the Office Action's objection, and Figure 4 and paragraph [0031] of the specification are amended to obviate minor typographical errors. Support for the amendments to claim 4 can be found, for example, in paragraph [0012] of the specification. No new matter is added. A Request for Continued Examination is attached. Reconsideration of the application in view of the above amendments and following remarks is respectfully requested.

I. OBJECTION

The Office Action objects to the title as not being descriptive. By this amendment, the title is amended to obviate this objection. Accordingly, withdrawal of the objection is respectfully requested.

II. §112 REJECTION

The Office Action rejects claim 4 under 35 U.S.C. §112, second paragraph. By this amendment, claim 4 is amended to obviate the rejection. Specifically, the recitation "as close as possible" has been replaced with "at the second lower surface." Applicants note that this appears to be the same amendment previously authorized to be made by Examiner's Amendment in Applicants' May 7, 2010 facsimile transmission to Examiner Han. Accordingly, withdrawal of the rejection is respectfully requested.

III. §103 REJECTIONS

The Office Action rejects claims 4, 11, 16 and 18 under 35 U.S.C. §103(a) over JP-A-2003-257385 to Murashige, in view of U.S. Patent No. 5,279,623 to Watanabe et al. (Watanabe), further in view of U.S. Patent No. 6,746,798 to Hiratsuka et al. (Hiratsuka); and claim 14 under 35 U.S.C. §103(a) over Murashige, in view of Watanabe and Hiratsuka,

and further in view of U.S. Patent No. 1,424,144 to Kunkel. The rejections are respectfully traversed.

Applicants respectfully assert that neither Murashige, Watanabe, Hiratsuka nor Kunkel, either alone or in combination, disclose or suggest a lithium ion secondary battery having at least a protruded terminal that is located at a second lower surface of a can where a two-stage step is formed so that a cooling jig can be installed and contacted to a sealed container such that only an outer surface of the flange of the can and the outer surface of the cap are exposed to the outside, as recited in independent claim 4.

Instead, Murashige discloses a sealed thin lithium ion secondary battery that has a flat battery case with a metal flat plate, a cover having a periphery part that has almost the same shape as a periphery part of a metal flat plate, a power generating element that has a positive electrode and a negative electrode. However, Murashige fails to disclose or suggest, at least, a cooling jig that is installed and contacted to a sealed container such that only the outer surface of the flange of the can and the outer surface of the cap are exposed to the outside, as recited in independent claim 4.

Neither Watanabe, Hiratsuka, nor Kunkel cure the deficiencies of Murashige.

Additionally, the lithium ion secondary battery of independent claim 4 can provide a number of unforeseeable and unexpected advantages over the art of record. For example: 1) an improved ability to prevent or reduce a drop in energy density per volume in a battery cell; 2) allowing easy operation upon welding the can and cap; and 3) minimizing damage and deformation resulting from heat exposure during welding.

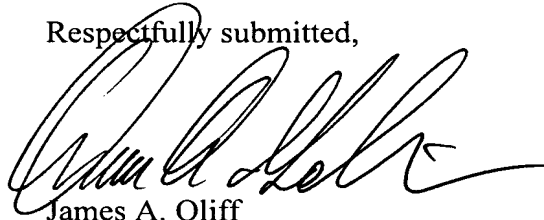
For at least the foregoing reasons, independent claim 4 is allowable over the applied references. Therefore, dependent claims 11, 14, 16, and 18 are also allowable based at least on their dependency from claim 4, as well as for the additional features they recite.

IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 4, 11, 14, 16 and 18 are earnestly solicited. Applicants respectfully request withdrawal of the objection and all rejections.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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JAO:OAG/mkg

Attachment:
Request for Continued Examination
Replacement Sheet

Date: August 5, 2010

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